WHAT IS CLAIMED IS:

1. An anamorphic converter comprising at least an anamorphic lens disposed on an image side of an imaging optical system,

wherein when a focal length conversion magnification in an arbitrary cross section X containing an optical axis of the anamorphic converter is assigned βx, a focal length conversion magnification in a cross section Y containing an optical axis and being perpendicular to the cross section X is assigned βy, an aspect ratio of an image pickup range in an image surface of the imaging optical system is assigned AR1, and an aspect ratio of an effective area of image pickup means is assigned AR2, the following relationship is established:

$$0.9 < (AR1 \times \beta x)/(AR2 \times \beta y) < 1.1$$

2. An anamorphic converter according to claim 1, wherein the anamorphic lens is provided within an afocal group.

3. An anamorphic converter according to claim 1, wherein both βx and βy are positive values, and the anamorphic converter has positive refracting powers in the cross section X and in the cross section Y.

4. An anamorphic converter according to claim 3, further comprising, from the imaging optical system side in a stated order, a first group of lenses having a negative refracting power, a second group of lenses including at least two or more anamorphic lenses, and a third group of lenses having a positive refracting power.

5. An anamorphic converter according to claim 3, wherein the following relationship is established:

$$1 \leq (AR2^2 + 1) \times \beta y^2/(AR1^2 + 1) < 2.6$$

6. An anamorphic converter according to claim 1, wherein both βx and βy are negative values, and the anamorphic converter further comprises at least one negative lens and two or more anamorphic lenses.

7. An anamorphic converter comprising at least an anamorphic lens disposed on an image side of an imaging optical system,

wherein when a focal length conversion magnification in an arbitrary cross section X containing an optical axis of the anamorphic converter is assigned βx, and a focal length conversion magnification in a cross section Y containing an optical axis and being perpendicular to the cross section X is assigned βy, both βx and βy

are negative values.

8. A lens device, comprising:

the anamorphic converter as claimed in any one of claims 1 to 7; and

the imaging optical system disposed on an object side with respect to the anamorphic converter.

9. An image pickup device, comprising:

the anamorphic converter as claimed in any one of claims 1 to 7;

an imaging optical system disposed on an object side with respect to the anamorphic converter; and

image pickup means disposed on the object side with respect to the anamorphic converter.

10. An anamorphic converter comprising at least an anamorphic lens disposed on an image side of an imaging optical system,

wherein when a focal length conversion magnification in an arbitrary cross section X containing an optical axis of the anamorphic converter is assigned βx, a focal length conversion magnification in a cross section Y containing an optical axis and being perpendicular to the cross section X is assigned βy, an aspect ratio of an image pickup range in an image surface of the imaging

optical system is assigned AR1, and an aspect ratio of an effective area of image pickup means is assigned AR2, the following relationships are established:

$$0.9 < (AR1 \times \beta x)/(AR2 \times \beta y) < 1.1$$

$$(AR2^2 + 1) \times \beta y^2/(AR1^2 + 1) < 1$$

11. An anamorphic converter according to claim 10, wherein the anamorphic lens is provided within an afocal group.

12. An anamorphic converter according to claim 10, wherein both βx and βy are positive values, and the anamorphic converter has positive refracting powers in the cross section X and in the cross section Y.

13. An anamorphic converter according to claim 12, further comprising, from the imaging optical system side in a stated order, a first group of lenses having a negative refracting power, a second group of lenses including at least two or more anamorphic lenses, and a third group of lenses having a positive refracting power.

14. An anamorphic converter according to claim 10, wherein both βx and βy are negative values, and

the anamorphic converter further comprises at least one negative lens and two or more anamorphic lenses.

15. A lens device, comprising:

the anamorphic converter as claimed in any one of claims 10 to 14; and

the imaging optical system disposed on an object side with respect to the anamorphic converter.

16. An image pickup device, comprising:

the anamorphic converter as claimed in any one of claims 10 to 14;

the imaging optical system disposed on an object side with respect to the anamorphic converter; and

image pickup means disposed on the object side with respect to the anamorphic converter.